NOTES ON THE COLEOPHORIDAE: A SEQUEL

By J. Newton *

This extension to my notes (in *Ent. Rec.* 91: 234) concerns two species of Coleophoridae only — *C. milvipennis Z.* and *C. alnifoliae* Barasche.

My appeal to anyone who has bred a specimen of alnifoliae from birch and had it confirmed by genitalia examination, has so

far produced no response.

From six cases on alder which I over-wintered from August 1978, five moths emerged, June 24th – July 2nd 1979. An examination of the genitalia confirmed that they were indeed *alnifoliae*. Until I get further evidence to the contrary, I believe this species feeds only on alder, and has a one-year cycle only in this country

as it is reported to have in other countries.

C. milvipennis Z. My experience shows this species to have a complicated life-history. In May 1979, I collected in Surrey 12 more cases from birch, two of which just after they had been constructed, as they were still quite limp. I was fascinated by the method of construction which was done by the larva mining a strip along the edge of the leaf from the base, in outline the same shape and size of the final adult case. I transferred these to a potted birch plant in my greenhouse and from them nine moths emerged, July 6th — 15th. The three remaining cases I left undisturbed and put out-of-doors for the winter, where they remained exposed to the elements until April 1980, when I returned them to the greenhouse. No further feeding took place and two moths emerged on May 5th.

It would appear then that the majority spend their first winter hibernating in a juvenile case, developing in the spring, and producing moths in July, while a minority hibernate in an adult case for

a second winter.

A further complication occurred in Surrey when I visited my site on September 19th 1979, and found to my surprise, five adult cases on birch. Moreover, they had obviously just been constructed, but by a method quite different from that previously described. On this occasion quite a large area of parenchyma had been removed from half a leaf, leaving a thin membranous cuticle. From this membrane a large rounded portion had been removed to form the case. Alongside, on the remaining half of the leaf was the completed case still quite soft. The thought immediately sprang to mind, could these be of alnifoliae after all? However, I kept the cases on a separate potted birch out-of-doors for the winter and having removed them to the greenhouse in the spring, all five cases produced moths, May 9th - 12th. A genitalia examination of one of these proved the species to be milvipennis.

In Britain, I imagine *milvipennis* to be on the northerly fringe of its European range, and still struggling to adapt itself here. No doubt some time in the distant future, natural selection will work it

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all out and a fixed pattern of behaviour will emerge. Meanwhile, I would like to see the job of sorting out the tangle to be undertaken by a lepidopterist scientifically better qualified than I, and to whom I would willingly give all the help I could from information at my disposal.

Acknowledgement

I am grateful to Dr. J. D. Bradley for checking a genitalia slide which I made of a female *milvipennis*.

ARHOPALUS RUSTICUS L. (COL.: CERAMBYCIDAE) IN KENT AND ESSEX. — Dr. G. A. Neil Horton's record of this longicorn beetle (as *Criocephalus*) from Monmouthshire (antea: 52) reminds me that my friend the late G. Shephard obtained the species in the vicinity of St. Margaret's and West Langdon, near Dover, and at Hatfield Forest, near Bishop's Storford, in the 1970s — both occurrences, as far as I know, being new county records. In the former area it was found repeatedly in their house (having presumably flown to light) by relatives of Mr. Shephard, and passed to him; one of these, dated 16.viii.68, he kindly presented to me. At Hatfield Forest he took a single example on a Scots pine log (July or August).

This insect, formerly confined with us as a native to the old pine forests of Strathspey, has within the last 3-4 decades colonized parts of southern England*, where it appears to have been first found at Canford Heath, Dorset, in 1958, by Mr. F. A. Hunter. The Dover record shows it to have now reached the extreme southeast. A. rusticus is said to be now more frequent than the very similar A. tristis F. (=Criocephalus ferus Muls.) in some southern districts, but I understand that they do not normally occur in the

same localities.

Arhopalus rusticus requires careful differentiation from its congener A. tristis. The shorter tarsi of the former is generally the first thing to strike the eye when similar-sized individuals of the two species are placed together; but perhaps the most reliable character and the least dependent on comparison lies in the hairy eyes of rusticus. Duffy (1952, Handb. Ident. Brit. Ins., 5 (12):9) gives size as one of the differences, assigning to rusticus a length of only 12-16 mm. This however must be a mistake (overlooked in my review of this work, Ent. Rec. 64: 363), for in fact both species have a size-range up to 30 mm.; cf. Fowler & Donisthorpe, 1913, Col. Brit. Isl., 6: 152-3. — A. A. ALLEN.

^{*}In this it is closely paralleled by an allied Cerambycid, Asemum striatum L., and by the Staphylinid Nudobius lentus Grav., both likewise exclusively Highland insects in earlier days. Further, it seems extraordinary that the two Arhopalus spp., Tetropium gabrieli Weise, and Melanophila acuminata Deg. — all conspicuous beetles of coniferous woodland — were entirely unknown in Britain until about the turn of the century.